



## SEQUENCE LISTING

<110> Desjarlais, John R.

<120> APPARATUS AND METHOD FOR DESIGNING  
PROTEINS AND PROTEIN LIBRARIES

<130> 16380-003001

<140> US 10/071,859

<141> 2002-02-06

<150> US 09/877,695

<151> 2001-06-08

<150> US 60/266,711

<151> 2001-02-06

<160> 4

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary motif

<400> 1

Ser	Leu	Pro	Ser	Gly	Trp	Thr	Gln	Leu	Thr	Lys	Ala	Ser	Asp	Asp	Thr
1				5					10					15	
Thr	Tyr	Tyr	Tyr	Asn	Lys	Thr	Thr	Asp	Val	Val	Thr	Asn	Thr	Arg	Pro
			20					25					30		
Thr	Asp														

<210> 2

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary motif

<221> VARIANT

<222> 1

<223> Xaa = Ser, Asn, or Asp

<221> VARIANT

<222> 8

<223> Xaa = Gln, Lys, Pro, Val, Glu, or Arg

<221> VARIANT

<222> 10

<223> Xaa = Thr or Lys

<221> VARIANT

<222> 12

<223> Xaa = Ala or Ser

<221> VARIANT

<222> 13

<223> Xaa = Ser or Gly

<221> VARIANT

<222> 15

<223> Xaa = Asp, Asn, Glu, or Ser

<221> VARIANT

<222> 22

<223> Xaa = Lys or Gln

<221> VARIANT

<222> 24

<223> Xaa = Thr or Ser

<221> VARIANT

<222> 25

<223> Xaa = Asp or Asn

<221> VARIANT

<222> 27

<223> Xaa = Val or Lys

<221> VARIANT

<222> 31

<223> Xaa = Arg, Asn, or Gln

<221> VARIANT

<222> 34

<223> Xaa = Asp or Asn

<400> 2

Xaa	Leu	Pro	Ser	Gly	Trp	Thr	Xaa	Leu	Xaa	Lys	Xaa	Xaa	Asp	Xaa	Thr
1				5				10					15		
Thr	Tyr	Tyr	Tyr	Asn	Xaa	Thr	Xaa	Xaa	Val	Xaa	Thr	Asn	Thr	Xaa	Pro
			20				25					30			
Thr	Xaa														

<210> 3

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary motif

<221> VARIANT

<222> 1

<223> Xaa = Ser, Asn, Asp, or Glu

<221> VARIANT  
<222> 8  
<223> Xaa = Gln, Lys, Pro, Val, Glu, Arg, or Asn

<221> VARIANT  
<222> 9  
<223> Xaa = Leu or Gln

<221> VARIANT  
<222> 10  
<223> Xaa = Thr or Lys

<221> VARIANT  
<222> 12  
<223> Xaa = Ala or Ser

<221> VARIANT  
<222> 13  
<223> Xaa = Ser or Gly

<221> VARIANT  
<222> 14, 25, 29, 34  
<223> Xaa = Asp or Asn

<221> VARIANT  
<222> 15  
<223> Xaa = Asp, Asn, Glu, or Ser

<221> VARIANT  
<222> 16  
<223> Xaa = Thr or Ser

<221> VARIANT  
<222> 17  
<223> Xaa = Thr or Val

<221> VARIANT  
<222> 19  
<223> Xaa = Tyr or Phe

<221> VARIANT  
<222> 22  
<223> Xaa = Lys, Gln, or Glu

<221> VARIANT  
<222> 24  
<223> Xaa = Thr or Ser

<221> VARIANT  
<222> 26  
<223> Xaa = Val, Thr, or Gln

<221> VARIANT  
<222> 27  
<223> Xaa = Val, Lys, or Thr

<221> VARIANT

<222> 28

<223> Xaa = Thr or Gln

<221> VARIANT

<222> 31

<223> Xaa = Arg, Asn, or Gln

<400> 3

Xaa	Leu	Pro	Ser	Gly	Trp	Thr	Xaa	Xaa	Xaa	Lys	Xaa	Xaa	Xaa	Xaa	Xaa
1	.			5				10				15			
Xaa	Tyr	Xaa	Tyr	Asn	Xaa	Thr	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Thr	Xaa	Pro
			20				25						30		
Thr	Xaa														

<210> 4

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> exemplary motif

<221> VARIANT

<222> 1

<223> Xaa = Ser, Asn, or Asp

<221> VARIANT

<222> 8

<223> Xaa = Gln or Lys

<221> VARIANT

<222> 10

<223> Xaa = Thr or Lys

<221> VARIANT

<222> 12

<223> Xaa = Ala or Ser

<221> VARIANT

<222> 13

<223> Xaa = Ser or Gly

<221> VARIANT

<222> (14)...(15)

<223> Xaa = Asp or Asn

<221> VARIANT

<222> 17

<223> Xaa = Thr or Val

<221> VARIANT

<222> 19

<223> Xaa = Tyr or Phe

<221> VARIANT

<222> 22  
 <223> Xaa = Lys or Gln

<221> VARIANT  
 <222> 24  
 <223> Xaa = Thr or Ser

<221> VARIANT  
 <222> 25  
 <223> Xaa = Asp or Asn

<221> VARIANT  
 <222> 27  
 <223> Xaa = Val or Lys

<221> VARIANT  
 <222> 28  
 <223> Xaa = Thr or Gln

<221> VARIANT  
 <222> 31  
 <223> Xaa = Arg or Asn

<221> VARIANT  
 <222> 34  
 <223> Xaa = Asp or Asn

<400> 4  
 Xaa Leu Pro Ser Gly Trp Thr Xaa Leu Xaa Lys Xaa Xaa Xaa Xaa Thr  
   1                  5                  10                  15  
 Xaa Tyr Xaa Tyr Asn Xaa Thr Xaa Xaa Val Xaa Xaa Asn Thr Xaa Pro  
           20                  25                  30  
 Thr Xaa